



Rethinking The Pluralist Agenda In Economics Education*

Robert F. Garnett, Jr.

Abstract

Two overlapping yet distinct views of pluralism vie for the allegiance of economics educators: an 'intellectual diversity' view in which the pluralist goal is to integrate competing paradigms into standard curricula, and a 'critical thinking' view in which the aim is to cultivate students' ability to reach reasoned conclusions in the face of analytical, empirical or normative uncertainties. This paper defends the latter view. Educators who aspire to achieve and expand the pluralistic outcomes specified in the QAA Economics Benchmarking Statement would be better served by pursuing the student-centred aim of intellectual freedom rather than the teacher-centred aim of paradigmatic diversity.

Introduction

The prospects for enhancing pluralism in UK undergraduate degree programmes seem to have dimmed considerably since the introduction of 'subject benchmarking statements' by the Quality Assurance Agency (QAA) in 2001 (Simonetti, 2007). Many observers see little hope of persuading the QAA to incorporate substantive pluralism into the core curriculum of the single honours economics degree. Since most PhD economists take the single honours degree (rather than an interdisciplinary joint honours degree), Roberto Simonetti concludes that 'it will be increasingly unlikely for the next generation of economists to receive an education that emphasizes pluralism' (Simonetti, 2007: 121) since the QAA is unlikely to allow heterodox theories such as Marxian or old institutionalist economics to reside within the single honours core curriculum.

Is Simonetti's pessimism warranted? The answer, I argue, depends on one's conception of pluralism. If one sees pluralism in economics education as a

campaign to reform standard courses and curricula via the 'integration of heterodox economic theories' (Barone, 1991: 16), then a pessimistic appraisal is indisputable. But positive possibilities begin to multiply if one instead conceives pluralism as a philosophy and practice of critical thinking. The latter view offers a cogent, student-centred approach to economics education. It also foregrounds a set of educational goals and values (including intellectual autonomy) that many academic economists find compelling. The breadth and strength of this common ground opens the door to cooperation across paradigmatic borders, e.g., heterodox and mainstream economists working together to integrate reflective judgment into the QAA's list of 'subject-specific skills'.

One prominent advocate of the pluralism-as-critical thinking view is the Association for Heterodox Economics (AHE). In response to the QAA's 2006 consultation request, the AHE called on the QAA to elaborate the critical thinking elements of the Economics Benchmarking Statement, 'to spell out what [the critical thinking approach] consists of, how it might usefully be taught, and how it might be assessed' (Freeman, 2007: 2). The AHE response takes the occasional polemical turn, declaring at one point that the QAA Economics Benchmark is 'entirely lacking in a pluralist perspective' (Freeman 2007: 1). Yet their overall position is constructive. They explicitly link pluralism to critical thinking, arguing that 'an adequate definition and assessment of critical thinking is coterminous with a pluralist approach' (Freeman 2007: 10). On this premise, pluralist educators need not agree on the value of heterodox or mainstream economic ideas. One can be highly critical of either approach, or both, and still be a committed pluralist. My aim in this paper is to affirm and extend the AHE position by highlighting its advantages – philosophically, educationally and strategically – over the notion of pluralism as competing paradigms.

By seeking to disentangle the pluralist economics education agenda from any school of thought agenda (heterodox, mainstream or otherwise), I do not mean to suggest that certain schools of thought are incompatible with pluralism, nor that students' exposure to contending paradigms is not an important catalyst for critical thinking. I am sympathetic to the claim that students' intellectual autonomy and critical thinking skills are more effectively enhanced via sustained exposure to multiple paradigms than by monistic textbook approaches (Moseley, Gunn and Georges, 1991; Feiner and Roberts, 1995; Ferber, 1999; Earl, 2000; Colander, 2001; Feiner, 2003; Fullbrook, 2003; Knoedler and Underwood, 2003; Underwood, 2004; Becker, 2007; O'Donnell, 2009). However, just as it is wrong to assume that mathematical formalism is the only way to produce economic knowledge, I believe it is equally misguided to imagine that exposure to multiple and/or heterodox economic paradigms is the only way to achieve a pluralistic education. Economics

educators who aspire to achieve and expand the pluralistic outcomes specified in the QAA Economics Benchmarking Statement would be better served by pursuing the student-centred aim of intellectual freedom rather than the teacher-centred aim of paradigmatic diversity.

Defining pluralism

Traditional economics education posits a unified disciplinary perspective and places a high value on teaching students to 'think like economists' (Siegfried *et al.*, 1991). The idea of a single economic way of thinking rests on several tacit assumptions about the nature of economic knowledge and education, notably:

- There is a scientific consensus about what comprises good economics – a core of foundational concepts, methods and propositions that is 'accepted by all but a few extreme left-wing and right-wing writers' (Samuelson, 1967: 197–98).
- This disciplinary consensus is reflected in standard micro- and macroeconomic textbooks.
- The chief task of economics educators is to disseminate these core ideas as '*the economic way of thinking*'.

Though rarely stated or defended explicitly, these premises are generally conveyed to PhD students as part of their disciplinary socialisation. With active encouragement from the economics textbook industry, new PhDs build their courses and intellectual personas on these premises, thus transmitting them to future generations.

For example, basic micro- and macroeconomic theory courses are often taught from textbooks that present a single consensus view. Teachers and textbook publishers justify this practice on pedagogical grounds, claiming that the inclusion of contending perspectives would 'risk undermining the entire venture ... with too many qualifications and alternatives [so that] teachers and their students may abandon economics entirely out of frustration born of confusion and uncertainty' (Siegfried and Meszaros, 1997: 249). In addition, leading texts remain steeped in what Ronald Coase (1992) called blackboard economics, emphasising deductive, engineering logic and highly abstract, mechanical conceptions of human behaviour, markets and government, with little space for history, institutions, ethics and other sources of analytical and normative complexity. Individual instructors may aspire to create more intellectual space for students by teaching a wider range of models, by including more real-world examples, or by emphasising policy dilemmas. But critical thinking goals are difficult to achieve in courses tied to textbooks that trivialise scholarly disagreement and recite only the prevailing conclusions (Klamer, 1990; Myers, 1992).

The risks of introducing ambiguity or uncertainty in core theory courses are undoubtedly real. Even more dispiriting, however, are the risks of not inviting students to recognise that economics 'contains more than one approach, more than one theory and more than one proposed solution to every problem it faces' (Freeman, 2009: 7). If it is true that 'superficially absorbed content ... leads to intellectual arrogance' (Paul, 1999: 129), then catechistic economics courses are surely a barrier to student learning. By denying students the opportunity to move beyond stylised images of knowledge, learning and economics, such courses may unwittingly encourage students (especially high achievers) to become uncritical defenders of a narrowly conceived economics. These are the dangers of presenting economics as a 'single coherent view'. As Marianne Ferber argues:

Much more damage is likely to be done when people erroneously believe that they have all the answers than when they are aware of their ignorance... Furthermore, it is difficult, if not impossible, to teach economics effectively while pretending that there is consensus in the discipline about either theory or policy ... Ignoring these issues deprives students of learning about the most thought-provoking discussions of the profession (Ferber, 1999: 137–38).

Suppression of controversy may also lead students to disengage, emotionally and intellectually, once they perceive the limited applicability of textbook knowledge to complex real-life events and arguments. This may partially explain why high-achieving graduates of US undergraduate economics programmes have shown limited proficiency in applying economic theory to real-life personal, professional and public problems (Salemi and Siegfried, 1999; Hansen, Salemi and Siegfried, 2002; Katz and Becker, 1999).

What exactly does pluralism mean in the context of economics education? I propose to define pluralism as both a philosophy and a practice: (1) a particular view of knowledge and education; and (2) a learner's capacity for critical thinking and intellectual autonomy. With regard to (1), pluralism assumes that disciplines are never quite as monolithic as standard textbooks might imply. Each discipline is assumed to be comprised of multiple approaches whose practitioners are engaged in ongoing disputes over the meaning and value of basic concepts and methods of analysis. On many important issues, a consensus on which 'all experts agree' does not exist and most likely will never exist. In addition, pluralists generally assume that the aim of university education is to enable each student to assume 'a position of intellectual independence' within his or her discipline (Strike, 1982: 135). 'This requires teachers both to give students reasons for what they are asked to believe, within students' capacity to grasp them, and to teach so as to expand the students'

capacity to comprehend and assess reasons' (Strike, 1982: 43). To this end, education, even at the undergraduate level, must include the incompleteness, uncertainty and multiplicity of understandings that exist within a disciplinary field.

Pluralism as practice refers to students' willingness and ability to engage in critical thinking. In the tradition of Dewey (1933, 1938), Perry (1970), King and Kitchener (1994), Nelson (1997) and Paul (1999), critical thinking is usefully defined as the art of reflective judgment: the ability to reach reasoned solutions to problems for which 'there is no way to apply a formula to derive a correct solution and no way to prove definitively that a proposed solution is correct' (King and Kitchener, 1994: 6). As such, critical thinking is marked by three characteristics: (1) uncertainty about the truth value of one's own arguments (Nelson, 1997: 63); (2) reflective judgment: the unavoidable necessity of 'making judgments in the context of uncertainty' (Borg and Borg, 2001: 20); and (3) reflexivity: a commitment to 'question our own purposes, evidence, conclusions, implications, and point of view with the same vigour as we question those of others' (Paul and Elder, 2001: 2) since 'judgments derived from the reflective thinking process always remain open to further scrutiny, evaluation, and reformulation' (King and Kitchener, 1994: 7–8).

On this definition, critical thinking differs fundamentally from the 'analytical thinking' (Borg and Borg, 2001: 20) and 'complex correct thinking' (Nelson, 1997: 62) promoted by standard economics textbook problems. Students' intellectual autonomy – 'the ability and responsibility of individuals to make independent intellectual choices' (Thoma, 1993: 128) – is not promoted by exclusive exposure to problems that can be uniquely solved with high degrees of certainty. Economics educators have long aspired to the Enlightenment goal of teaching students to think for themselves (Fels, 1974: 403; Siegfried *et al.*, 1991: 212 and 199; Shackelford, 1992: 522; Ferber, 1999: 136). Yet, as Borg and Borg (2001: 20) observe, economists tend not to worry about potential failure in this area because they assume that 'the analytical nature of most economics courses inherently teaches students to think critically'.

In an important sense, a pluralist approach to knowledge and education is distinguished by its commitment to learners' intellectual autonomy: not unchecked subjectivity but opportunities to discover the relativity or open-endedness of ideas, methods or authority figures that one previously regarded as universal or absolute. The link between pluralism and intellectual autonomy is well illustrated by the familiar Perry scheme (Perry 1970). On the Perry ladder of intellectual and ethical development, learners progress from a black-and-white monist stage in which they 'assume that valid questions have certain answers and that teachers should teach those answers or unambiguous rules for finding them' (Nelson, 1989: 17) to higher levels of thinking and decision-making in which they must choose among second-

best alternatives with no theoretical guarantee that their choices will be welfare-improving (Lipsey and Lancaster 1956: 23). Learners are propelled to each higher stage by the realisation that the subject matter 'encompasses meaningful uncertainty' (Nelson 1989: 18). With each new layer of uncertainty come new demands and opportunities to think for oneself.

In economic terms, a pluralist approach aims to increase learners' effective freedom to determine which ideas they will buy or sell in the disciplinary marketplace. The marketplace analogy evokes Adam Smith, whose theories of economic and moral order placed distinct emphasis on intellectual autonomy, judgment and learning. In his *Theory of Moral Sentiments* (1976 [1759]), Smith explores the human capacity to judge one's own conduct through dialogue with one's conscience or 'impartial spectator'. 'We endeavour to examine our own conduct as we imagine any other fair and impartial spectator would examine it ... It is only by consulting this judge within ... that we can ever make any proper comparison between our own interests and those of other people' (Smith, 1976 [1759]: 110 and 134). Smith's moral agents are not isolated automatons but socially embedded individuals who gain the capacity to think for themselves via ongoing social interaction 'in the great school of self-command' (Smith, 1976 [1759]: 146). Philosopher Samuel Fleischacker (1999) suggests that Smith regarded this 'freedom to judge' as an elemental form of human freedom (see also Griswold, 1999: 180). On Fleischacker's reading, Smith 'construes freedom above all as that which enables one to judge for oneself – unlike a child, who requires others to judge for her, who requires tutelage' (Fleischacker, 1999: 4).

From principle to practice: expanding the pluralist enterprise

The discussion thus far has outlined a critical thinking view of pluralism in economics education. In this section I turn to the practical question of how individual undergraduate programmes and the community of economics educators at large, might strengthen their commitments to pluralist education. Within the UK, the QAA benchmarking statement identifies several learning goals that could rightly be regarded as pluralistic, namely:

- 'the ability to think critically about the limits of one's analysis in a broader socio-economic context' (QAA, 2007: 1);
- an appreciation of 'the existence of different methodological approaches' (QAA, 2007: 2);
- an 'appreciation of the history and development of economic ideas and the differing methods of analysis that have been and are used by economists' (QAA, 2007: 3);

- an 'ability to discuss, analyse and *evaluate* government policy and to assess the performance of the UK and other economies and of the global economy' (QAA, 2007: 3; emphasis added);
- 'higher-order skills of reasoning and analysis' (QAA, 2007: 6); and
- an acquired 'familiarity with the possibility that many economic problems may admit of more than one approach and may have more than one solution' (QAA, 2007: 7).

How might these goals be actualised such that most students acquire an effective capacity for critical judgment? I offer three broad suggestions.

First, UK economics educators should join the AHE-led effort to beef up the critical thinking elements of the QAA's benchmarking statement. One obvious place to augment the current statement is its list of 'transferable skills' (QAA, 2007: 4–5). The current list includes mathematical and statistical skills as well as skills derived from core micro- and macroeconomic principles. These skills are meant to enable students to understand, evaluate, construct and communicate economic arguments in academic and non-academic settings. A central task of a pluralist curriculum would be to expand this list to include the critical thinking skills students must have in order to successfully 'engage differences of opinion, evaluate evidence, and form their own grounded judgments about the relative value of competing perspectives' (Association of American Colleges and Universities, 2006). Hodgson had a similar goal in mind when he proposed that basic philosophical skills (including history and philosophy of science) be added to all natural and social science curricula. 'Just as the requirement of mathematics is now virtually universal, so too should be some philosophy, and relevant parts of the history of ideas' (Hodgson, 2002: 132).

Second, UK department heads and faculty should exploit the flexibility afforded by an outcome-based assessment scheme. By defining pluralism as a learning outcome rather than as a specific mix of educational inputs (such as a paradigmatically diverse faculty or curriculum), each undergraduate programme is afforded the freedom to craft its own recipe for achieving critical thinking outcomes. With apologies to Rodrik (2007), the motto for pluralist curricular reform could be 'one goal, many recipes.'

Space does not permit even a brief discussion of the pedagogical methods through which the QAA's pluralistic outcomes might be achieved (Garnett and Butler, 2009). However, proponents of pluralism should be prepared to offer special support and encouragement to instructors and students, to help them navigate the difficulties of switching from monistic to pluralistic modes of teaching and learning. For

teachers, implementing pluralist pedagogies can create both more work and a greater fear of failure. The search for appropriate class materials (readings, films, speakers) and the development of inspiring yet accessible questions is generally more time consuming than preparing for lectures, particularly when lecture notes already exist. Emotional barriers may be even more powerful. '[W]hen we ask faculty to teach in new ways, we ask them to set aside or modify pedagogical modes that have served them well and still tie them to colleagues and mentors' (Nelson, 1999: 178). Pluralist education can create added uncertainty and emotional risks for students as well. To the extent that every step in the process of intellectual development 'involves not only the joy of realization but also a loss of certainty and an altered sense of self,' resistance is to be expected from most learners at some point (Perry cited in Kloss, 1994: 157).

These difficulties are compellingly conveyed in Peter Earl's account of 'the perils of pluralistic teaching' (Earl, 2000 and 2002).

I made one serious mistake right at the start of the subject ... I presumed that students were used to the notion that a university is a place where ideas are debated openly and difficult issues are not dodged, rather than a place at which one receives the present state of knowledge in neatly packaged form without any diversions into the history of the discipline or the personalities and politics that shaped it (Earl, 2002: 2).

Earl's experience led him to conclude that effective pluralist education requires explicit, prior exposure to a critical thinking framework such as the Perry scheme (Perry, 1970).

Subsequent cohorts of my students in New Zealand reacted differently, and this seems in large part to have been due to me teaching them at the start of the subject about Perry's work ... Gradually students come to see that it isn't a matter of scientists simply asserting their position is right but of arguing a case, which is what they realize everyone does in other parts of their lives. It is only by this stage that the student will be really comfortable with pluralistic teaching in which they are given contending perspectives and opportunities to test their fit in a variety of contexts and are then left to make up their minds with mentoring assistances from their teachers (Earl, 2002: 2–3).

My third and final suggestion is for pluralistic educators to promote curricular collaboration across paradigmatic lines. Nothing is more important to the prospects for pluralist reform in UK undergraduate programmes than the ongoing conversations within and among departments about whether, why, and how to implement or supplement the critical thinking elements of the QAA benchmark. The

QAA itself provides a potent catalyst for these conversations. But more powerful, ultimately, would be the discovery of shared intellectual or educational values among mainstream and heterodox colleagues. Students' intellectual freedom offers a compelling idiom for this purpose, highlighting the Enlightenment heritage we share as university educators. Intellectual autonomy is a value shared by all modern economists, regardless of methodological or ideological orientation. It provides a resonant language in which to discuss what is lacking in received modes of economics education and the appropriate ends and means of reform.

One promising vehicle for these conversations is David Colander and KimMarie McGoldrick's *Educating Economists* (Colander and McGoldrick, 2010), a volume in which mainstream and heterodox economists all address the editors' central question: 'How can undergraduate economics degree programmes contribute more effectively to the goals of a liberal education?' Liberal education is a less familiar term in the UK context but refers simply to education that is *liberalis* ('fitted for freedom'), an education that 'frees students' minds from the shackles of their own narrow experience' (Fels, 1974: 403). In the words of British economist George Shackle:

The first task of the University teacher of any liberal art is surely to persuade his students that the most important things he will put before them are questions and not answers. He is going to put up for them a scaffolding, and leave them to build within it. He has to persuade them that they have not come to the University to learn as it were by heart things which are already hard-and-fast and cut-and-dried, but to watch and perhaps help in a process, the driving of a causeway which will be made gradually firmer by the traffic of many minds (Shackle, 1953: 18).

The Colander and McGoldrick volume offers no facile prescriptions. The editors describe the process of pedagogical and curricular reform as conversational and bottom-up:

Much more discussion is needed about the focus of content taught in economics, and how that content is taught, if the economics major is to make the best contribution it can to a liberal education. We don't know what the 'best contribution' is, and believe that there are many ways that programmes can contribute, some of which may be seemingly contradictory. We strongly believe that positive change in any discipline does not come from the top down; it comes from the bottom up, and major change builds on the initiatives of individual schools. That is why the goal of this report is to open up a conversation rather than come up with a set of specific recommendations (Colander and McGoldrick, 2010: 37-38).

With financial support from the Teagle Foundation and the American Economics Association's Committee on Economic Education, *Educating Economists* is being circulated to every U.S. undergraduate economics department. The conversations generated by these essays – within departments and across the profession – offer a glimmer of hope for pluralistic reform, but only to the extent that they extend beyond the small circle of economists already committed to these reforms.

On the common ground of 'education for freedom', one can imagine a fruitful dialogue between a heterodox advocate of pluralist education and a mainstream educator who favours a 'less is more' rethinking of standard micro- and macroeconomics courses (e.g., Hansen, Salemi and Siegfried, 2002). The former would be inclined to see critical thinking (broadly defined) as an essential learning goal for all undergraduate economics programmes, whereas the latter would likely see critical thinking as just another name for the suite of skills our students acquire when we teach them to 'think like economists'. Yet both would seek to increase students' intellectual autonomy: one via critical thinking, the other by creating more space in basic theory courses for students to actively acquire – i.e. to make their own – the know-how to apply economic concepts to messy, real-life situations.

A generative question almost certain to emerge from such an encounter would be: 'How do economists think?' How do we ourselves evaluate competing arguments? How are our critical thinking styles already on display in the manner and content of our teaching? The answers to these questions contain potent resources for teaching. As Shackelford perceptively observes, most economics educators already teach reflective judgment:

Teachers of economics are constantly demonstrating or 'modeling' a critical thinking agenda in lectures and in the questions raised in class. Perhaps economists need to recognize, examine, and question their teaching agendas, particularly as they unconsciously relate to critical thinking skills (Shackelford, 1992: 575).

To put the same point in a different frame: heterodox critics of mainstream economics should resist the temptation to see the educational goals formulated by their mainstream colleagues (such as 'thinking like an economist') as inherently antithetical to pluralism and critical thinking. Rather than rejecting the goal of thinking like an economist, for example, we could work with our mainstream colleagues to creatively unpack, rethink and rearticulate this pregnant phrase – as Bartlett and Feiner (1992), Underwood (2004) and others have long suggested – so that it more accurately conveys the multiplicity of reasonable ways to think as an economist, including various perspectives on the nature and limits of human

knowledge. Doing so would allow us to re-examine what we deem to be the chief educational goal(s) of the economics major and whether or not 'helping our students to acquire the intellectual means to think for themselves as economists' deserves to be among them. These reflections might also unearth the liberal impulses – the yen for intellectual independence, the taste for devil's advocacy – that inspired the goal of 'thinking like an economist' in the first place.

Conclusion

Pluralist economics educators should endeavour to persuade their colleagues that reflective judgment is an essential learning outcome for undergraduate economics students and therefore merits more attention and substantive weight in the QAA Benchmarking Statement. When economists fail to respect and expand their students' capacities to think for themselves, we leave them ill prepared to 'grapple successfully with uncertainty, complexity, and conflicting perspectives and [to] still take stands that are based on evidence, analysis and compassion and are deeply centred in values' (Nelson, 1989: 71), unfit for intelligent participation in a 'messy, puzzling, and complicated world, in which there is absolutely no substitute for one's own active searching' (Nussbaum, 1997: 35). For the intellectual heirs of G.L.S. Shackle and Adam Smith, such an outcome is surely unacceptable.

On the difficult strategic question of how best to achieve this desired end, I believe it is imperative for heterodox advocates of pluralistic reform to separate their pluralist/QAA agenda from their heterodox/RAE agenda and to form alliances with their mainstream colleagues around the shared value of intellectual freedom. Some heterodox thinkers are sceptical of pluralism as a banner for heterodoxy because its foundations lie in the same Enlightenment traditions that spawned mainstream economics as well as heterodox economics (Davis, 2008). However, a successful campaign to reform economics education does not require a uniquely heterodox philosophy of education. It requires, rather, an awareness of the multiple and overlapping traditions of modern liberal and Enlightenment thought that we and our fellow economists share, and a determination to reach out in good faith to all educators who might be persuaded to join us in our quest for more open, critical and meaningful ways of educating economists.

Notes

- * I would like to thank the three anonymous reviewers and Andy Denis for their careful readings and illuminating criticisms of two previous drafts.

References

- Association of American Colleges and Universities (2006) *Academic Freedom and Educational Responsibility*. Washington, DC.
- Barone, C.A. (1991) 'Contending Perspectives: Curricular Reform in Economics', *Journal of Economic Education*, vol. 22(Winter), pp. 15–26.
- Bartlett, R.L. and Feiner, S.F. (1992) 'Balancing the Economics Curriculum: Content, Method, and Pedagogy', *American Economic Review*, vol. 82(2), pp. 559–64.
- Becker, W.E. (2007) 'Quit Lying and Address the Controversies: There are No Dogmata, Laws, Rules, or Standards in the Science of Economics', *American Economist*, vol. 51(1), pp. 3–14.
- Borg, J.R. and Borg, M.O. (2001) 'Teaching Critical Thinking in Interdisciplinary Economics Courses', *College Teaching*, vol. 49(1), pp. 20–29.
- Coase, R.H. (1992) 'The Institutional Structure of Production', *American Economic Review*, vol. 82(4), pp. 713–19.
- Colander, D. (2001) *The Lost Art of Economics: Essays on Economics and the Economics Profession*. Northampton, MA: Edward Elgar.
- Colander, D. and K. McGoldrick (eds) (2010) *Educating Economists: The Teagle Discussion*. Northampton, MA: Edward Elgar.
- Colander, D. and K. McGoldrick (2010) 'The Teagle Foundation Report: The Economics Major as Part of a Liberal Education', in Colander, D. and McGoldrick, K. (eds) *Educating Economists: The Teagle Discussion*, Northampton, MA: Edward Elgar, pp. 3–39.
- Davis, J.B. (2008) 'Heterodox Economics, the Fragmentation of the Mainstream, and Embedded Individual Analysis', in Garnett, R. and Harvey, J. (eds) *Future Directions for Heterodox Economics*, Ann Arbor: University of Michigan Press, pp. 53–72.
- Dewey, J. (1933) *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Lexington, MA: Heath.
- Dewey, J. (1938) *Logic: The Theory of Inquiry*. Troy, MO: Holt, Rinehart, & Winston.
- Earl, P.E. (2000) 'Indeterminacy in the Economics Classroom', in Earl, P.E. and Frowen, S.F. (eds), *Economics as an Art of Thought: Essays in Memory of G.L.S. Shackle*, London: Routledge, pp. 25–50.
- Earl, P.E. (2002) 'The Perils of Pluralistic Teaching and How to Reduce Them', *Post-Autistic Economics Review*, vol. 11(January), article 1.
- Feiner, S.F. (2003) 'On the History of Teaching Heterodox Economics', paper presented at History of Heterodox Economics in the 20th Century conference, University of Missouri at Kansas City (October).
- Feiner, S.F. and Roberts, B.B. (1995) 'Using Alternative Paradigms to Teach About Race and Gender: A Critical Thinking Approach to Introductory Economics', *American Economic Review*, vol. 85(May), pp. 367–71.
- Fels, R. (1974) 'Developing Independent Problem-Solving Ability in Elementary Economics', *American Economic Review*, vol. 64(May), pp. 403–7.
- Ferber, M.A. (1999) 'Guidelines for Pre-College Economics Education: A Critique', *Feminist Economics*, vol. 5(3), pp. 135–42.
- Fleischacker, S.F. (1999) *A Third Concept of Liberty*. Princeton: Princeton University Press.

- Freeman, A. (2007) 'Catechism versus Pluralism: The Heterodox Response to the National Undergraduate Curriculum Proposed by the UK Quality Assurance Agency', *EconPapers*. Retrieved September 2009 from <http://econpapers.repec.org/paper/pramprapa/6832.htm>
- Freeman, A. (2009) 'The Economists of Tomorrow', *EconPapers*. Retrieved September 2009 from <http://econpapers.repec.org/paper/pramprapa/15691.htm>
- Fullbrook, E. (ed.) (2003) *The Crisis in Economics: The Post-Autistic Economics Movement*. London: Routledge.
- Garnett, R. and M. Butler (2009) 'Should Economics Educators Care about Students' Academic Freedom?', *International Journal of Pluralism and Economics Education* 1(1/2): 148–160.
- Griswold, C.L., Jr. (1999) *Adam Smith and the Virtues of Enlightenment*. Cambridge: Cambridge University Press.
- Hansen, W.L., Salemi, M.K. and Siegfried, J.J. (2002) 'Use It or Lose It: Teaching Literacy in the Economics Principles Course', *American Economic Review*, vol. 92 (May), pp. 463–72.
- Hodgson, G.M. (2002) 'Visions of Mainstream Economics: A Response to Richard Nelson and Jack Vromen', *Review of Social Economy*, vol. 60(1), pp. 125–33.
- Katz, A. and Becker, W.E. (1999) 'Technology and the Teaching of Economics to Undergraduates', *Journal of Economic Education*, vol. 30(Summer), pp. 194–99.
- King, P.M. and Kitchener, K.S. (1994) *Developing Reflective Judgment: Understanding and Promoting Intellectual Growth and Critical Thinking in Adolescents and Adults*. San Francisco: Jossey-Bass.
- Klamer, A. (1990) 'The Textbook Presentation of Economic Discourse', in Samuels, W.J. (ed.), *Economics as Discourse*, Boston: Kluwer Academic Publishers, pp. 129–54.
- Kloss, R.J. (1994) 'A Nudge Is Best: Helping Students through the Perry Scheme of Intellectual Development', *College Teaching*, vol. 42(4), pp. 151–58.
- Knoedler, J. and Underwood, D. (2003) 'Teaching the Principles of Economics: A Proposal for a Multiparadigmatic Approach', *Journal of Economic Issues*, vol. 37(3), pp. 697–725.
- Lipsey, R.G. and Lancaster, K. (1956) 'The General Theory of Second Best', *Review of Economic Studies*, vol. 24 (December), pp. 11–32.
- Moseley, F., Gunn, C. and Georges, C. (1991) 'Emphasizing Controversy in the Economics Curriculum', *Journal of Economic Education*, vol. 22(Summer), pp. 235–40.
- Myers, G. (1992) 'Textbooks and the Sociology of Scientific Knowledge', *English for Specific Purposes*, vol. 2, pp. 139–60.
- Nelson, C.E. (1989) 'Skewed on the Unicorn's Horn: The Illusion of Tragic Trade-off between Content and Critical Thinking in the Teaching of Science', in Crow, L.W. (ed.), *Enhancing Critical Thinking in the Sciences*. Washington, D.C.: Society of College Science Teachers, pp. 17–27.
- Nelson, C.E. (1997) 'Tools for Tampering with Teaching's Taboos', in Campbell, W.E. and Smith, K.A. (eds), *New Paradigms for College Teaching*. Edina, MN: Interaction Books, pp. 51–77.
- Nelson, C. E. (1999) 'On the Persistence of Unicorns: The Trade-off Between Content and Critical Thinking Revisited', in Pescosolido, B.A. and Aminzade, R. (eds), *The Social Worlds of Higher Education*, Thousand Oaks, CA: Pine Forge Press, pp. 168–84.
- Nussbaum, M.C. (1997) *Cultivating Humanity: A Classical Defence of Reform in Liberal Education*. Cambridge: Harvard University Press.
- O'Donnell, R. (2009) 'Economic Pluralism and Skill Formation: Adding Value to Students, Economics, and Societies', in Garnett, R., Olsen, E. and Starr, M. (eds), *Economic Pluralism*, London: Routledge, pp. 262–77.
- Paul, R. (1999) 'Critical Thinking, Moral Integrity, and Citizenship: Teaching for the Intellectual Virtues', in Pescosolido, B.A. and Aminzade, R. (eds), *The Social Worlds of Higher Education*, Thousand Oaks, CA: Pine Forge Press, pp. 128–36.
- Paul, R. and Elder, L. (2001) *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Upper Saddle River, NJ: Prentice Hall.
- Perry, Jr., W.G. (1970) *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. New York: Holt, Rinehart and Winston.
- Quality Assurance Agency for Higher Education (2007) 'Economics', Gloucester: QAA.
- Rodrik, D. (2007) *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton: Princeton University Press.
- Salemi, M.K. and Siegfried, J.J. (1999) 'The State of Economic Education', *American Economic Review*, vol. 89(May), pp. 355–61.
- Samuelson, P.A. (1967) *Economics*, 7th edition. New York: McGraw-Hill.
- Shackelford, J. (1992) 'Feminist Pedagogy: A Means for Bringing Critical Thinking and Creativity to the Classroom', *American Economic Review*, vol. 82(2), pp. 570–76.
- Shackle, G.L.S. (1953) *What Makes an Economist?* Liverpool: Liverpool University Press.
- Siegfried, J.J. and Meszaros, B.T. (1997) 'National Voluntary Content Standards for Pre-College Economics Education', *American Economic Review*, vol. 87(2), pp. 247–53.
- Siegfried, J.J., Bartlett, R.L., Hansen, W.L., Kelley, A.C., McCloskey, D.N. and Tietenberg, T.H. (1991) 'The Status and Prospects of the Economics Major', *Journal of Economic Education*, vol. 22(Summer), pp. 197–224.
- Simonetti, R. (2007) 'The Impact of the Economics Benchmarking Statement on Pluralism in Economics Teaching in the UK', in Groenewegen, J. (ed.), *Teaching Pluralism in Economics*, Northampton, MA: Edward Elgar, pp. 104–22.
- Smith, A. (1976 [1759]) *The Theory of Moral Sentiments*, Raphael, D.D. and Macfie, A.L. (eds), Oxford: Oxford University Press.
- Strike, K.A. (1982) *Liberty and Learning*. New York: St. Martin's Press.
- Thoma, G.A. (1993) 'The Perry Framework and Tactics for Teaching Critical Thinking in Economics', *Journal of Economic Education*, vol. 24(Spring), pp. 128–36.
- Underwood, D.A. (2004) 'Principles of Macroeconomics: Toward a Multiparadigmatic Approach', *Journal of Economic Issues*, vol. 38(2), pp. 571–81.

Contact details

Robert F. Garnett, Jr.
Texas Christian University
Department of Economics / Box 298510
Fort Worth, TX 76129, USA

Tel: +1 817-257-7990
Email: r.garnett@tcu.edu